

What is claimed is:

Claims

1. An apparatus comprising:

a inlet at a first end of a pipe, wherein a flow of fluid enters the inlet;

a first outlet at a second end of the pipe;

a second outlet disposed between the first end and the second end of the pipe;

a flow deflector arranged and constructed to deflect a first part of the flow out of the second outlet.

2. The apparatus of claim 1, wherein the flow deflector is formed from a section of the pipe, which section is depressed into the pipe next to a slot formed in the pipe, such that the second outlet is comprised of the depressed section of the pipe and an opening formed between the slot and the depressed section of the pipe.

3. The apparatus of claim 1, wherein the flow deflector is attached to a part of an edge of a hole formed in the second outlet.

4. The apparatus of claim 1, further comprising a conduit disposed near the second outlet such that the first part of the flow is deflected by the flow deflector into the conduit.

5. The apparatus of claim 1, wherein the flow deflector has a shallow end disposed closer to the second end of the pipe than to the first end of the pipe and wherein the flow deflector has a wide end disposed closer to the first end of the pipe than to the second end of the pipe.

6. The apparatus of claim 5, wherein the flow deflector curves gradually between the shallow end and the wide end.

7. The apparatus of claim 5, wherein the wide end extends radially further into the pipe than the shallow end extends radially into the pipe.

8. The apparatus of claim 1, wherein the flow deflector has a shape that is at least partially curved.

9. The apparatus of claim 1, wherein the flow deflector has a concave surface that faces the second outlet.

10. The apparatus of claim 1, wherein the flow deflector directs exhaust gas into an exhaust gas recirculation system of an internal combustion engine.

11. The apparatus of claim 1, wherein the flow deflector directs gas from an exhaust gas recirculation system into an air intake manifold of an internal combustion engine.

12. The apparatus of claim 1, wherein the flow deflector comprises a tongue that extends into the pipe in a direction at least partially toward the inlet.

13. An apparatus comprising:

a inlet at a first end of a pipe;

a first outlet at a second end of the pipe;

a second outlet disposed between the first end and the second end of the pipe;

a flow deflector arranged and constructed such that when a flow of fluid enters the inlet, a first part of the flow is deflected by the flow deflector out the second outlet;

wherein the flow deflector is formed from a section of the pipe, which section is depressed into the pipe near a slot formed partially through the pipe.

14. The apparatus of claim 13, further comprising a conduit disposed near the second outlet such that the first part of the flow is deflected by the flow deflector into the conduit.

15. The apparatus of claim 13, wherein the flow deflector has a shallow end disposed closer to the second end of the pipe than to the first end of the pipe, wherein the flow deflector has a wide end disposed closer to the first end of the pipe than to the second end of the pipe, and wherein the wide end extends radially further into the pipe than the shallow end extends radially into the pipe.

16. The apparatus of claim 13, wherein the flow deflector has a shape that is at least partially curved.

17. The apparatus of claim 13, wherein the flow deflector has a concave surface that faces the second outlet.

18. The apparatus of claim 13, wherein the flow deflector directs exhaust gas into an exhaust gas recirculation system of an internal combustion engine.

19. An apparatus comprising:

a inlet at a first end of a pipe;

a first outlet at a second end of the pipe;

a second outlet disposed between the first end and the second end of the pipe;

a flow deflector arranged and constructed such that when a fluid enters the inlet, a first part of the flow is deflected by the flow deflector out the second outlet, wherein the flow deflector comprises:

a concave surface that faces the second outlet;

a shallow end disposed closer to the second end of the pipe than to the first end of the pipe;

a wide end disposed closer to the first end of the pipe than to the second end of the pipe, wherein the wide end extends radially further into the pipe than the shallow end extends radially into the pipe.

20. The apparatus of claim 19, wherein the flow deflector is formed from a section of the pipe, which section is depressed into the pipe next to a slot formed in the pipe, such that the second outlet is comprised of the depressed section of the pipe and an opening formed between the slot and the depressed section of the pipe.